



MULTI PLANES BALANCING OF ROTATING ELEMENT

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ABSTRACT

Unbalance is the most common source of vibration in machines with rotating parts. Unbalance in rotor is the result of an uneven distribution of mass causes the rotor to vibrate excessively at running speed .Balancing in rotors prevent excessive loading of bearings and avoid fatigue failure, thus increasing the useful of machinery. In this project, multiple planes unbalance problem was used to induce dynamic unbalance problem and theoretical calculation using influence coefficient method was use to solve it. The vibratory analysis of rotating machine was used to illustrate this behavior. This experimental procedure was carried out using trial mass calculation the influent coefficient and then the corrected mass value and location was experimentally carried out. Finally, the balanced rotor is trimmed with additional mass to perfectly balance the rotor. Based on the result of mass balance, it is expected that the theoretical result and experiment result will be identical.

TABLE OF CONTENTS

CONTENT	PAGE
PAGE TITLE	i
ACKNOWLEDGEMENT	ii
ABSTARCT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATION	xiii

CHAPTER 1	INTRODUCTION
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1.1	Problem statement	1
1.2	General Objective	3
1.3	Scope	3

CHAPTER 2

LITERATURE REVIEW

2.1	Introduction	4
2.1.1	Balancing	5
2.1.2	Single Plane Balancing	6
2.1.3	Multi Plane Balancing	6
2.2	Introduction to Influent Coefficient	7
2.3	Summary	8

CHAPTER 3

THEORETICAL BACKGROUND

3.1	Introduction	9
3.2	Principle of Balancing	9
3.3	Fundamental	11
3.3.1	Mass Center	12
3.3.2	Center of Gravity	12
3.3.3	Axis of Rotation	12
3.3.4	Principal of Inertia	13
3.3.5	Centrifugal Force	13
3.3.6	Amplitude	14
3.3.7	Frequency	15
3.3.8	Period (T)	16
3.3.9	Sine Vibration	17
3.3.10	Magnitude	18
3.4	Unbalance and Balancing	20
3.4.1	Unbalance	20
3.4.2	Balancing	25
3.5	Balancing Principle	25
3.5.1	Single Plane	29